REMARKS

In the Office Action dated December 19, 2003, the Examiner rejected claims1-7, 11-18, 22-29, 33 and 34 and withdrew claims 8-10, 19-21 and 30-32 from consideration. With this Amendment, claims 6-10 are amended.

In the Office Action, and also via telephone, the Examiner required election of one of four species comprising claims 7, 18 and 29 (species I), claims 8, 19 and 30 (species II), claims 9, 20, and 31 (species III) and claims 10, 21, and 32 (species IV). Applicant hereby affirms the election of species I that was made over the telephone.

The Examiner rejected claims 1-7, 11-18, 22-29, 33 and 34 under 35 U.S.C. 102(e) as being anticipated by Kwan (US 6,504,838). Applicant points out that the Kwan patent and the present application both claim priority under 35 U.S.C. § 120 to the same patent application, namely, Serial No. 09/522,185. The present application is a CIP of 09/522,185, and the Kwan patent is a continuation of 09/522,185. Applicant submits that the named inventor in the present application is the sole inventor of the subject matter claimed in the present application. Applicant further submits that the subject matter of the independent claims, i.e., claims 1, 11, 22, 33 and 34 is disclosed in the parent application 09/522,185. Applicant therefore submits that the Kwan patent is not prior art to the present application because Kwan has the same effective filing date as the present application, since they both claim priority to the same parent application. Applicant further submits that the Kwan patent is not invention "by another" since the inventor in the present application is the actual inventor of the relevant subject matter disclosed in the Kwan patent. Thus, Applicant submits that claims 1-7, 11-18, 22-29, 33 and 34 are not anticipated by Kwan.

The Examiner rejected claims 1-6, 11-17, 22-28, 33 and 34 under 35 U.S.C. 102(e) as being anticipated by Eriksson (US 6,064,873). Claim 1 reads as follows:

> 1. A method of processing communication signals in a communication system having a detector for detecting a parameter of a communication signal, comprising steps of:

(a) receiving a communication signal with a non-linear processor (NLP) adapted to examine the signal and to decide whether or not to enter an active state based upon a parameter of the signal, wherein if the NLP enters an active state, the NLP performs non-linear processing on the signal;

(b) communicating to the detector whether the NLP is active or inactive; and

(c) if the NLP is active, disabling a processing step of the detector.

On pages 5 and 6 of the Office Action, the Examiner points out that, according to the Eriksson disclosure, network echo cancellers include a tone detector (TD) 22, which detects a tone of an answering machine and disables some or all of the echo canceller's functions if answering tones with certain predetermined characteristics are received. This aspect of the Eriksson disclosure is described at col. 2, lines 8-13 and at col. 4, lines 54-57. However, the Examiner goes on to assert, "Thus, the tone detector determines whether the NPL (sic) is active or inactive. When the NPL (sic) is active, then the tone detector does not need to detect a parameter in the communication signal." Applicant disagrees with this conclusion. Eriksson does not disclose nor suggest that the TD (22, 122, 124) is disabled, or that the TD ceases detecting tones if the NLP is active. Disabling an echo canceller based on the tones detected by a tone detector (22, 122) does not anticipate disabling a tone detector if the NLP is active.

The Examiner also cites col. 5, lines 10-32, of Eriksson, which states in relevant part, "Preferably, NLP 126 is activated if the mobile phone being used generates an appreciable amount of audible echo (e.g., surpasses a predetermined threshold level). As an added advantage, the DTD 116 can disable the operation of the second NLP 126 (and/or first NLP 114) if the parties using the mobile phone and PSTN telephone are talking simultaneously." Applicant submits that this passage in no way anticipates the present invention. Disabling an NLP if a double talk detector detects double talk does not anticipate disabling a detector if the NLP is active. Thus, Applicant submits that claim 1, and all claims depending therefrom, are not anticipated by Eriksson.

The Examiner rejected claims 1, 11, 22 and 33 under 35 U.S.C. 103(a) as being

unpatentable over either Kirla (U.S. 6,574, 336 B1) or Younce (U.S. 5,274,795) in view of Sorqvist et al (U.S. 6,658, 107). On page 7 of the Office Action, the Examiner says, "Kirla teaches a method for activating and deactivating a non-linear processor (NLP) of an echo canceller, as shown in Fig. 9, based on a talk state, wherein when the NLP is activated, it performs non-linear processing to remove residual echoes [col. 2, lines 41-55; col. 7, lines 43-65; col. 8, line 66 to col. 9, line 40]. Applicant submits that this merely describes conventional operation of an NLP and does not anticipate disabling a detector if the NLP is active, as is claimed in claim 1.

On page 8 of the Office Action, the Examiner says, "Younce et al teaches a method for controlling a state (i.e., active or inactive) of a non-linear processor (NLP) of an echo canceller, as shown in Figs. 5-9, based on talk state [col. 7, line 58 to col. 8, line 14]. Again, Applicant submits that this merely describes operation of an NLP that is well-known in the art and does not anticipate disabling a detector if the NLP is active, as is claimed in claim 1.

Also on page 8 of the Office Action, the Examiner states, "Neither Kirla nor Younce et al teaches expressly detecting a parameter in a communication signal using a voice activity detector (VAD) and then applying the parameter to control the state of the NPL (sic)." Applicant submits that this statement incorrectly characterizes the substance of claim 1. The Examiner goes on to say that "Sorqvist et al teaches applying a VAD to detect a parameter in a communication signal and then using it to determine whether speech (either source or echo) is present in the input to the NPL (sic)." Applicant submits that this teaching does not anticipate disabling the VAD when the NLP is active. The Examiner further argues that "when the NPL (sic) is active there is no need for detecting the parameter in the signal (i.e., VAD is disabled) [Fig. 4; col. 7, lines 5-10]." Applicant submits that there is no teaching or suggestion in Sorqvist of disabling the VAD when the NLP is active. The cited passage (col. 7, lines 5-10) states, "For example, a Voice Activity Detector (VAD) can be used to determine whether speech (either source or echo) is present in the input to the NLP. During speech pauses, the VAD indicates that only noise is present, and an estimate of the power spectral density of the prevailing background noise can be updated as:"

Applicant submits that using a VAD to detect whether speech is present at the input to a NLP does not anticipate diasabling that VAD if the NLP is active. In fact, this aspect of Sorqvist teaches directly away from claim 1. For at least the above-described reasons, Applicant submits that claim 1 and all claims depending therefrom are not obvious in view of Kirla or Young and Sorqvist.

Independent claims 11, 22, 33 and 34 were rejected for the same reasons described above with respect to claim 1. Applicant submits that claims 11, 22, 33 and 34 are allowable for the reasons discussed above regarding claim 1. Therefore, Applicant respectfully requests allowance of claims 1-34.

The Commissioner is hereby authorized to charge any additional required fees or credit any overypayment by this submission to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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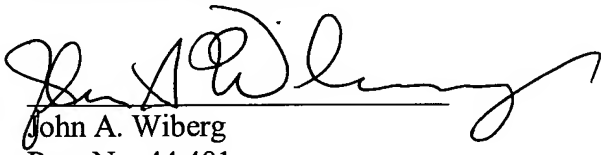
Respectfully submitted,



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